

# SEQUENCE LISTING

<110> NOVARTIS AG  
NOVARTIS PHARMA GMBH

<120> OCULAR GENE THERAPY

<130> 116566-053

<140>

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<150> PCT/EP03/09497

<151> 2003-08-27

<150> 60/406,470

<151> 2002-08-28

<160> 25

<170> PatentIn Ver. 3.3

<210> 1

<211> 183

<212> PRT

<213> Homo sapiens

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Ser	Pro	Leu	Ser	Gly	Gly	Met	Arg	Gly	Ile	Arg	Gly	Ala	Asp	Phe	Gln
		20						25					30		

Cys	Phe	Gln	Gln	Ala	Arg	Ala	Val	Gly	Leu	Ala	Gly	Thr	Phe	Arg	Ala
		35					40					45			

Phe	Leu	Ser	Ser	Arg	Leu	Gln	Asp	Leu	Tyr	Ser	Ile	Val	Arg	Arg	Ala
	50					55					60				

Asp	Arg	Ala	Ala	Val	Pro	Ile	Val	Asn	Leu	Lys	Asp	Glu	Leu	Leu	Phe
65					70					75					80

Pro	Ser	Trp	Glu	Ala	Leu	Phe	Ser	Gly	Ser	Glu	Gly	Pro	Leu	Lys	Pro
				85					90					95	

Gly	Ala	Arg	Ile	Phe	Ser	Phe	Asp	Gly	Lys	Asp	Val	Leu	Arg	His	Pro
		100						105					110		

Thr	Trp	Pro	Gln	Lys	Ser	Val	Trp	His	Gly	Ser	Asp	Pro	Asn	Gly	Arg
		115					120					125			

Arg	Leu	Thr	Glu	Ser	Tyr	Cys	Glu	Thr	Trp	Arg	Thr	Glu	Ala	Pro	Ser
	130					135					140				

Ala	Thr	Gly	Gln	Ala	Ser	Ser	Leu	Leu	Gly	Gly	Arg	Leu	Leu	Gly	Gln
145					150					155					160

Ser Ala Ala Ser Cys His His Ala Tyr Ile Val Leu Cys Ile Glu Asn  
165 170 175

Ser Phe Met Thr Ala Ser Lys  
180

<210> 2  
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<212> DNA  
<213> Homo sapiens

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gcggcatgcg gggcatccgc ggggcccact tccagtgtt ccagcaggcg cgggccgtgg 120  
ggctggcggg caccttccgc gccttccgtg cctcgccgct gcaggacctg tacagcatcg 180  
tgcgccgtgc cgaccgcgca gccgtgccca tcgtcaacct caaggacgag ctgctgtttc 240  
ccagctggga ggctctgttc tcaggctctg agggctccgt gaagcccggg gcacgcattc 300  
tctcctttga cggcaaggac gtccctgaggc accccacctg gcccagaag agcgtgtggc 360  
atggctcgga ccccaacggg cgcaggctga ccgagagcta ctgtgagacg tggcggacgg 420  
aggctccctc ggccacgggc caggcctcct cgctgctggg gggcaggctc ctggggcaga 480  
gtgccgcgag ctgccatcac gcctacatcg tgctctgcat tgagaacagc ttcattgactg 540  
cctccaagta g 551

<210> 3  
<211> 207  
<212> PRT  
<213> Mus musculus

<400> 3  
Met Glu Thr Asp Thr Leu Leu Leu Trp Val Leu Leu Leu Trp Val Pro  
1 5 10 15  
Gly Ser Thr Gly Asp Ala Ala His Thr His Gln Asp Phe Gln Pro Val  
20 25 30  
Leu His Leu Val Ala Leu Asn Thr Pro Leu Ser Gly Gly Met Arg Gly  
35 40 45  
Ile Arg Gly Ala Asp Phe Gln Cys Phe Gln Gln Ala Arg Ala Val Gly  
50 55 60  
Leu Ser Gly Thr Phe Arg Ala Phe Leu Ser Ser Arg Leu Gln Asp Leu  
65 70 75 80  
Tyr Ser Ile Val Arg Arg Ala Asp Arg Gly Ser Val Pro Ile Val Asn  
85 90 95  
Leu Lys Asp Glu Val Leu Ser Pro Ser Trp Asp Ser Leu Phe Ser Gly  
100 105 110  
Ser Gln Gly Gln Leu Gln Pro Gly Ala Arg Ile Phe Ser Phe Asp Gly  
115 120 125  
Arg Asp Val Leu Arg His Pro Ala Trp Pro Gln Lys Ser Val Trp His

130                      135                      140  
 Gly Ser Asp Pro Ser Gly Arg Arg Leu Met Glu Ser Tyr Cys Glu Thr  
 145                      150                      155                      160  
 Trp Arg Thr Glu Thr Thr Gly Ala Thr Gly Gln Ala Ser Ser Leu Leu  
 165                      170                      175  
 Ser Gly Arg Leu Leu Glu Gln Lys Ala Ala Ser Cys His Asn Ser Tyr  
 180                      185                      190  
 Ile Val Leu Cys Ile Glu Asn Ser Phe Met Thr Ser Phe Ser Lys  
 195                      200                      205

<210> 4  
 <211> 624  
 <212> DNA  
 <213> Mus musculus

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 cccctgtctg gaggcattgcg tggatccgt ggagcagatt tccagtgtt ccagcaagcc 180  
 cgagccgtgg ggctgtcggg caccttccgg gctttcctgt cctctagggt gcaggatctc 240  
 tatagcatcg tgcgcctgtc tgaccggggg tctgtgccca tcgtcaacct gaaggacgag 300  
 gtgctatctc ccagctggga ctccctgttt tctggctccc agggccaagt gcaaccggg 360  
 gcccgcattc tttcttttga cggcagagat gtccctgagac acccagcctg gccgcagaag 420  
 agcgtatggc acggctcgga cccagtggt cggaggctga tggagagtta ctgtgagaca 480  
 tggcgaactg aaactactgg ggctacaggt caggcctcct ccctgtgtgc aggcaggctc 540  
 ctggaacaga aagctgcgag ctgccacaac agctacatcg tcctgtgcat tgagaatagc 600  
 ttcatgacct ctttctccaa atag 624

<210> 5  
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 <212> PRT  
 <213> Homo sapiens

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 Ala Pro Gln Gln Glu Ala Leu Ala  
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<210> 6  
 <211> 38  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
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<400> 6  
 actggtgacg cggcccatac tcattcaggac tttcagcc

<210> 7  
<211> 32  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic  
primer

<400> 7  
aagggtatc gatctagctg gcagaggcct at

32

<210> 8  
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<212> DNA  
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<220>  
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cactgcttac tggcttatcg

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<210> 9  
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<212> DNA  
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<220>  
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<400> 9  
ctgatgagta tgggccgcgt caccagtgg

29

<210> 10  
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<220>  
<223> Description of Artificial Sequence: Synthetic  
primer

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32

<210> 11  
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<223> Description of Artificial Sequence: Synthetic  
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<210> 12

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<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic  
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actggagaaa gaggtttatc tagctactag

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<210> 13

<211> 18

<212> PRT

<213> Adenovirus

<400> 13

Met	Arg	Tyr	Met	Ile	Leu	Gly	Leu	Leu	Ala	Leu	Ala	Ala	Val	Cys	Ser
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Ala Ala

<210> 14

<211> 96

<212> DNA

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<223> Description of Artificial Sequence: Synthetic  
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<210> 15

<211> 29

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cagatgacat cctggccag	19
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ctatacagga aagtatggca gc	22
<210> 20	

<211> 118  
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<223> Description of Artificial Sequence: Synthetic  
oligonucleotide

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cagcccctca gcaagaagcg ctgctcaca gccaccgca cttccagccg gtgctcca 118

<210> 21  
<211> 123  
<212> DNA  
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<220>

<223> Description of Artificial Sequence: Synthetic  
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ctgccagagc cctcccggcc aggcaaagga gaaagaagat ccaggccctc atggaagctt 120  
ggc 123

<210> 22  
<211> 28  
<212> DNA  
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<220>

<223> Description of Artificial Sequence: Synthetic  
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<400> 22  
gcgcatgtcg acagaatatg ggccaaac 28

<210> 23  
<211> 28  
<212> DNA  
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<220>

<223> Description of Artificial Sequence: Synthetic  
primer

<400> 23  
gcgctactgc agagctaata agctacac 28

<210> 24  
<211> 27  
<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic  
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<400> 24

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27

<210> 25

<211> 27

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
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<400> 25

gcttcgaacg cgtagcggcc aaccctc

27